

Developmental Dysplasia of the Hip

Developmental dysplasia of the hip (DDH) is a disorder characterized by abnormal positioning of the femoral head in the acetabulum of the pelvis. In patients with severe degrees of DDH, the femoral head may be subluxed or completely dislocated.



PLAY PICMONIC

Cause

Abnormal Femoral Head in Acetabulum

[Abnormal Femur Head at Acid-tab-bull](#)

Developmental dysplasia of the hip (DDH) is a disorder characterized by abnormal positioning of the femoral head in the acetabulum of the pelvis. In patients with severe degrees of DDH, the femoral head may be subluxed or completely dislocated.

Newborn Assessment

Positive Barlow Sign

[Positive \(+\) Bar-low](#)

The Barlow maneuver is a physical maneuver performed on infants, used to screen for DDH to assess for subluxation or dislocation of the femoral head. The dislocation will be palpable.

Clicking with Adduction

[Clicking-camera with Add-duct-tape](#)

If the Barlow test is positive, a clicking, or 'clunk' sound will be heard and felt with adduction of the thigh and outward hip pressure. The test is also performed with the infant in a supine position.

Positive Ortolani Sign

[Positive \(+\) Origami](#)

The Ortolani test is a physical maneuver performed on infants to screen for DDH and is typically done after the Barlow to reduce the dislocation.

Clicking with Abduction

[Clicking-camera with Abs-abducting](#)

If the Ortolani test is positive, a clicking, or 'clunk' sound will be heard and felt with abduction of the thigh and upward hip pressure. The test is performed with the infant in a supine position.

Asymmetrical Limb Lengths and Folds (Gluteal and Thigh)

[Asymmetrical Limb Lengths with Folds](#)

Visual inspection of an infant with DDH will reveal shortening of the limb on the affected side and asymmetrical gluteal and thigh folds.

Older Child Assessment

Trendelenburg Sign

[Trendy-lady-bug Sign](#)

In older children, the Trendelenburg sign is an indication of DDH. The Trendelenburg sign is positive if the child's pelvis tilts downward on the unaffected side while balancing on the foot ipsilateral to the affected hip.

Interventions

Abduction Device

[Abs-abducting Device](#)

If DDH is diagnosed at 6 months of age or earlier, the condition can typically be corrected using an abduction device. The device must be worn for 24 hours a day until the condition is resolved, and the hip is stable.

Pavlik Harness

[Pelvic Harness](#)

The Pavlik harness is the most commonly used abduction device. The device must be worn for 24 hours a day until the condition is resolved, and the hip is stable. Skin care and monitoring for red areas under the straps and skin folds is important. No lotions or powders to the area and place the diaper under the straps.

Closed Reduction

[Closed Replacement](#)

If treatment with an abduction device is unsuccessful or if the child is diagnosed after 6 months of age, a closed reduction will be performed to correct the condition.